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EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/896,886

Applicant(s)

GALLOWAY ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-110 is/are pending in the application.
- 4a) Of the above claim(s) 91-110 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 65,66,72 and 73 is/are allowed.
- 6) ☒ Claim(s) 1-64,67-71 and 74-90 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☒ Claim(s) 1-110 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.                      6) ☐ Other:

## DETAILED ACTION

### ELECTION/RESTRICTION

1. Applicant's election with traverse of Group Ia (claims 1-90) in Paper No. 4 is acknowledged. The traversal is on the ground(s) that follow:

a. The examiner erred when she stated "With respect to the rest of the unrelated inventions, there is no requirement that undue burden be addressed. See MPEP 806.04 and 808.1 (a)". Applicants allege that the criteria for serious burden on the examiner does exist for independent inventions as well as distinct inventions and cites MPEP 803 to support his allegation and that the examiner has not met the criteria. They go on to state "Thus, if the subject matter of the pending claims is such that there would be no serious burden on the examiner to search and examine all of the pending claims at the same time, the examiner is to do so, *even if* the pending claims are drawn to independent or distinct inventions."

b. "A comparison of the claims of Groups Ia-Ib, II, III, IV and Va-Vf makes it abundantly clear that the claims of these 11 groups have quite similar subject matter and overlap to such an extent that there will be no serious burden on the Examiner to search and examine all of the pending claims at the same time." This statement is supported with the following allegations:

- i. "... all of the pending claims include a layer capable of being exposed to radiation that comprises a modified pigment product..."
- ii. "Therefore, each of the restricted Groups of claims are interrelated and include a layer that can be exposed to radiation, such layer comprising a modified pigment product."

c. Group Ib, i.e. a method of imaging the printing plate of claim 1 that is part of Group Ia, would not be an undue burden because the search for the printing plate of Group Ia would also encompass methods of their imaging.

d. Group II "pertains to a flexographic printing plate which comprises a radiation-absorptive layer comprising at least one modified pigment product. Flexographic printing plates are a specific type of printing plate used in image reproduction ... and are therefore a subset of the broader category of printing plates."

This traversal is not found persuasive because of the following:

With respect to a above, the examiner was not exact enough in her words. There is a requirement that undue burden exist with respect to the unrelated inventions as argued by applicants, but there is no requirement beyond the facts set forth in this examiner's restriction that requires *further* address of undue burden. Where the inventions claimed are independent, i.e. where they are not connected in design, operation, or effect under the disclosure of the particular application under consideration, the facts relied on for this conclusion are in essence the reasons for insisting upon restriction. See particularly MPEP 808.01. The examiner does state for the record that the search for thermal transfer recording material, i.e. Group III, is completely different than the search for unimaged printing plates, i.e. Group Ia, and the search for proofing material, i.e. Group IV, is completely different than for Group Ia printing plates, and the search for already imaged black matrices i.e. Va-Vf is probably not even overlapping with the search for printing plates like those of Group Ia. As to the method of forming a printing plate, Group Ib, there is no overlap with Groups III, IV and Va-Vf. Since Group Ia has been elected, the issue of separation of Groups III, IV and Va-Vf are at this time moot because none of them have been elected in this application.

With respect to c above, the restriction has set forth the necessary criteria as to why the method, i.e. Group Ib is distinct from the plate, i.e. Group Ia, and the reasons there is undue burden. Applicants have failed to prove or provide a convincing argument that the alternative use suggested by the examiner cannot be accomplished as set forth in MPEP 806.05 (h) as the response to the properly set forth reasons given by the examiner. The examiner notes that rejoinder of process claims to the elected plate claims may be possible at a later point "if applicants elects claims direct to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim...". See MPEP 821.04 and Official Gazette notice dated March 26, 1996 (2284 O.G. 86) for guidance under which this would be applicable. Applicants have not addressed examiner's reasons for restriction of Group Ia from Group Ib as required. Thus, the restriction of Group Ib from elected Group Ib is maintained. As to the difference in search, the examiner notes that searches for unimaged printing plates in class 430 do not mandatorily

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include searches for imaging them. The examiner has over 15 years experience searching in class 430 and believes she is an expert in the manner of searching such applications with respect to the US classification system. The broad scope of Group Ia also include all unimaged printing plates with radiation-absorptive pigment layers. This group includes those imaged heat from a print head or by spark discharge as well and includes a search in class 101 where such thermal head imageable plates are classified. The search for Group Ib which is limited to methods of imaging with a laser is limited to Class 430 methods of imaging printing plates. The printing plates of Group Ia are not even limited to imagewise exposure for formation. The pigment layers could be anhalation layers, filter layers, imaging layers, etc. Thus, the scope of the plate is quite broad enough to present an undue burden in this examiner's eyes but there is no second criteria of distinctness met to separate the plate into species for election. The addition of searching methods without meeting the requirements of rejoinder is for the reasons originally given still standing. Applicants reasons fail to remove those reasons. The restriction remains with respect to Group Ia and Group Ib.

With respect to d above, the examiner notes for the record she did not set forth why Group I was distinct from Groups Ia and Ib. The reasons are set forth now. Inventions Ia and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because there is no requirement that a UV curable layer be present in the plates of Group Ia. The subcombination has separate utility such as a flexographic printing plate with a modified pigment product that is outside the scope of all the claims in Group Ia as in a radiation absorptive layer wherein there is no binder or an acrylic binder (claim 23 of Group Ia which is the only independent claim in Group Ia that has the same broad scope of pigment claimed as in Group II). The examiner notes that Group II is really not a subcombination of Group Ia. The flexographic printing plates of Group II possess "a radiation-absorptive layer, wherein the radiation-absorptive layer comprised at least one modified pigment product." None of the claims In Group Ia only claims 23-24 and 34-35 have the same generic "modified pigment product". However, the radiation absorptive layer of claims

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23-24 and 34-35 is not the same generic layer of Group II because they all require the presence of a phenolic polymer. Group II plates do not even require the presence of a polymeric binder. Thus, the Group II is not a subspecies of Group Ia because the flexographic plates of Group II are not fully encompassed by any one claim in Group Ia. Group Ia is not a subcombination of Group Ia because the plates of Group Ia do not require the presence of a UV curable layer. What is true of Groups II and Group Ia is that they have a group of subcombinations in common. This does not make one Group a species of the other. In *Ex parte Smith*, 1888, C.D. 131, 44 O.G. 1183 (Comm'r Pat 1888) it was held that a subcombination was not generic to the different combinations in which it was used. Applicants did not present a claim to "modified pigment product" which is the subcombination held in common by Group Ia and Group II. All claims but 23-24 and 34-35 have subspecies of this "modified pigment product" in common with Group II. The examiner failed to present reasons for separating Group Ib from Group II. The reasons are as follows. Inventions II and Ib are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process can be practiced with another materially different product such as a plate wherein the image layer is the radiation absorptive layer without a UV curable layer beneath. i.e. a printing plate wherein the radiation absorptive layer is ablated to expose an aluminum substrate wherein the radiation layer acts to be ink repellent and the substrate fountain solution treatment ink accepting or the plate is a flat lithographic plate or a gravure plate, neither being flexographic.

With respect to b above, the examiner notes she has set forth why the eleven groups are either independent, i.e. unrelated, or distinct as well as how the undue burden has been set forth. With respect to i, applicants did not claim a layer capable of being exposed to radiation that comprises a modified pigment product. All layers that are capable of being exposed to radiation. This statement does not require anything happen upon such exposure. Applicants claim printing plates, methods of making printing plates, thermal transfer recording materials, proofing material, and five separate imaged black matrices that do not appear to overlap each other by any species in view of the disclosure. Printing plates with pigment layers are known. Modified

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pigments are known. Applicants did not claim a printing plate comprised of a layer comprised of a modified pigment product. All independent claims are more limited than this. Applicants did not present a generic claim linking groups III, IV and Va-f or linking these groups with Groups Ia-b/II. All that the inventions have in common is the idea of using a modified pigment product in a radiation absorptive layer. Applicants never define what "modification" includes. The closest place to doing so is in paragraph [0013] wherein with respect to printing plates comprising a substrate and a radiation absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product and a phenolic polymer, the modified pigment product comprises a pigment having attached at least one organic group. It is not even clear this is a definition because instant claim 23 is the same layer but claim 25 dependent thereon sets forth the limit that the pigment have at least one organic group attached. Thus, if claim 25 is to further limit claim 23 as originally set forth then how is claim 23 further limited by claim 25? Thus, applicants have not linked their different imaging and imaged systems by any generic set of claims. The examiner has set forth why the groups are mutually exclusive. The restriction requirement stands. With respect to separating groups Va-Vf. This issue is moot because applicants elected none of the members. However, each member is described by a separate set of pigments. There is no black matrix claim to only using a modified pigment product. Each pigment is more limited than this in each group. Applicants have not shown how these groups overlap each other.

Applicants have not stated one group, say the printing plates are the same as the proofing material or the same as the thermal transfer recording material. The examiner believes that the issues for each system are radically different as are the searches.

The requirement is still deemed proper but is not made final due to the new insertion of reasons for separating Group Ia from Group II. As to burden, the level of proof necessary to support the requirement has been met with the clarification given above.

2. Claims 91-110 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

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## **IDS**

3. The information disclosure statement filed January 30, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The incomplete references are Lin et al (5,281,261) that is missing the bottom of each column, and WO 99/23174 and WO/9951690 which are both missing every other page. These citations have been cancelled from applicants' PTO 1449 for failure to present a complete legible copy of each. The examiner has cited them in her PTO-892 form and sent a complete copy of each to applicants with this action.

4. The examiner notes with respect to applicants Information Disclosure Statement filed January 30, 2003 the following:

Derwent Abstract No. 82-28019E is not an English Abstract of a document with a May 30, 1981 publication date. The date given is the date the priority document was filed

## **OBJECTIONS TO THE DISCLOSURE**

5. The disclosure is objected to because of the following informalities: In paragraph [0067] applicants need to add the status, e.g., the patent number if it has matured into a patent, of the application.

Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: Arquad DMHTB in paragraphs [0090], [0093], [0104] and [0105] is not accompanied by generic disclosure.

Appropriate correction is required.

## **NOTES FROM EXAMINER**

7. The use of the trademark Arquad DMHTB in paragraphs [0090], [0093], [0104] and [0105] has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology. The examiner notes for the record that there is no generic terminology given for this trademark. Names used in trade are permissible in patent applications if: (A) Their meanings are established by an accompanying definition which is sufficiently precise and definite to be made a part of a claim, or (B) In this country, their meanings are well-known and satisfactorily defined in the literature. Condition (A) or (B) must be met at the time of filing of the complete application. See particularly MPEP 608.01(v).



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Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

8. The examiner notes applicants in [0059] reference above Kirk Othmer reference but do not have such a reference above. In [0007] applicants reference DBP 879205 but the examiner has no idea what this is. Applicants reference BET in [0027] and [0066] without explaining what BET is. Neither is found in the claim language thus the understanding of either is not essential to the claimed invention.

#### **STATUTES**

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Or if applicable

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

## **REJECTIONS/OBJECTIONS TO CLAIMS**

12. Claims 23-24, 74-82 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have used the term "modified pigment product" throughout their specification but have not clearly defined what "modified pigment product" means. In paragraph [0013] is found

[0013] The present invention further relates to printing plates comprising a substrate and a radiation-absorptive layer, wherein the radiation-absorptive

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layer comprises at least one modified pigment product and a phenolic polymer.  
The modified pigment product comprises a pigment having attached at least one organic group.

but in paragraph [0029] is found

[0029] The modified pigment product used in the printing plates of the present invention preferably comprises a pigment having attached at least one organic group. The pigments are modified using methods known to those skilled in the art such that chemical groups (e.g., polymeric and organic) are attached to the pigment, which provides a more stable attachment of the groups onto the pigment compared to adsorbed groups, e.g., polymers, surfactants, and the like.

Thus, does the statement of paragraph [0013] with respect to the plates with phenolic polymer and modified pigment product limit the modified pigment product of instant claims 23-24 to modifications of pigments that "attach" at least one organic group or does the general statement of paragraph [0029] govern what is meant by "modified pigment product" in claims 23-24. Paragraph [0029] makes clear that modification is only preferably a pigment having attached at least one organic group. Claim 25 dependent upon claim 23 seems to support the broader interpretation of paragraph [0029] wherein the modified pigment product comprises pigment having attached at least one organic group. If claim 25 is to further limit claim 23 then the modified pigment product of claim 23 must be broader than that defined in claim 25. If this is so the "modified pigment product" of claim 23 is not defined by applicants. Thus, modification means any modification of a pigment in any manner is encompassed by the "modified pigment product" of claim 23. This modification could be grinding the pigment to a finer size as in a physical modification or adding inorganic modifications to the surface of the pigment or just coating the pigment with a polymer wherein there is no attachment to the pigment at all if attachment is meant in a chemical attachment sense. In view of this confusion, the limits of claims 74-90 also come in to question. Claim 74 requires "at least one modified pigment product comprising a pigment that is at least partially coated with one or more polymeric coatings." Are these coatings required to be organic? Are these coatings "attached" to the pigment? What are the limits here? Claims 1-22, and 25-73 clearly require that the pigment have attached an organic group of one kind or another. Thus, this confusion is not a part of those claims because

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each invention set forth defines the modified pigment product in such a fashion as to make clear the pigment is attached to an organic group. Thus, the limits of claims 23-24 and 74-90 are confusing because applicants have not made clear what is meant by the broad term "modified pigment product". Does the term change with each system? It is not clear. For examination purposes the examiner has taken the term to mean any modification of any nature of a pigment since this is the broadest reasonable interpretation in view of the confusion evidenced.

13. In the alternative, if applicants take "modified pigment product" to mean with respect to the invention of claim 23 what is set forth in paragraph [0013] above, then claim 25 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 23. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

14. Claims 49-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 49-53 reference the radiation-absorptive layer further comprising a polymer. Since claim 46 already comprises a polymer, i.e. the modified pigment product is or at least is comprised of a polymer by definition then what is meant by further comprising a polymer is confusing. Further, there is no clear antecedent basis for the polymer being further defined by claims 51-53 since it is not clear if two polymers or one is present in the narrowest of interpretations of claim 49. Thus, what is meant by this claim language is confusing. Vinyl in the modified pigment product is the polymer referenced in claim 46. The examiner has assumed for examination purposes applicants intended the polymer of claim 49 to be a polymer separate from the modified pigment product.

15. Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Vinyl is limited in claim 46 to a homo or copolymer of acrylic monomer units. Neither acrylic ester or methacrylic ester is homo or copolymers of acrylic monomer units. While the ester part may be a polymer, the acrylic group is not what is left when an acrylic polymer is formed. Thus, the limits of claim 48 do not make sense. The examiner has assumed

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for examination purposes that applicants intended homo or copolymers of acrylic or methacrylic esters.

16. Claims 56-64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants do not define what is encompassed by "allyleneimine-based polymer or copolymer." The addition of 'based' to a definite term, i.e. allyleneimine, without definition of the "based" term leaves unclear what the addition of "based" was intended to convey. See particularly *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955) and similar arguments with respect to the addition of "type" to an otherwise definite expression. See also MPEP 2173.05 (b). This indefinitcy is further compounded by claiming derivatives of the polyethyleimine in claim 57. Are which derivitives? Those that have this based structure? Was based used to include derivatives? Any thing derived from polyehyleneimine is included in claim 57 as long it falls within the limits of the "alklyeneimine-based polymer or copolymer of claim 56.

17. Claims 58-64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 58-64 reference the radiation-absorptive layer further comprising a polymer. Since claim 56 already comprised a polymer, i.e. the modified pigment product is or at least is comprised of a polymer by definition then what is meant by further comprising a polymer is confusing. Further, there is no clear antecedent basis for the polymer being further defined by 59-62 since it is not clear if two polymers or one is present in the narrowest of interpretations of claim 58. Thus, what is meant by this claim language is confusing. EI is the polymer referenced in claim 56. The examiner has assumed for examination purposes applicants intended the polymer of claim 58 to be a polymer separate from the modified pigment product.

18. Claims 67-71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 67-71 reference the radiation-absorptive layer further comprising a polymer. Since claim 65 already comprised a polymer, i.e. the modified pigment product is or at least is comprised of a polymer by definition then what is meant by further comprising a polymer is confusing. Further, there is no clear antecedent basis for the polymer being further defined by 68-71 since it is not clear if two polymers or one is present in the

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narrowest of interpretations of claim 58. Thus, what is meant by this claim language is confusing. SMA is the polymer referenced in claim 65. The examiner has assumed for examination purposes applicants intended the polymer of claim 67 to be a polymer separate from the modified pigment product.

19. Claims 41-49 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (WO 99/51690) as evidenced by Grabley et al (WO 98/31550). Johnson et al in Example 15, pages 27-28 and Example 2, page 19 in the making of 2E make a printing plate that has all but the acrylate resins of claims 41-45. However, on page 13-14, Johnson et al teach using a much broader group of materials for their printing plates. The references fully incorporated into Johnson et al include WO98/31550 which is Grabley et al. Grabley et al in Example 6 teach using a pigment mixed with a polyacrylate resin in the radiation absorbing layer and on page 5 other acrylate ester resins as well as (meth)acrylic acid resin are listed as binders for the radiation absorbing pigment layers used in the printing plates set forth. Since Grabley et al is completely incorporated by Johnson et al then the plates of Grabley et al wherein the modified pigments of Johnson et al are used instead of those disclosed Grabley et al make prima facie obvious applicants' printing plates of claims 41-45 because Johnson et al teaches their use together. Wherein the pigments of Johnson et al from page 5, lines 25 to page 6, lines 34, and polymeric groups of polystyrene, styrene copolymers and acrylic polymers are used to modify the pigments, the printing plates of Johnson et al make prima facie obvious applicants' plates of claims 46-49, 52-55. The examiner notes that the date of importance in Johnson et al is October 14, 1999 and it is considered in this 103 (a) rejection via 35 USC 102(a).

20. Claims 41-49 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (6,336,965 B1) as evidenced by Grabley et al (WO 98/31550). The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR

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1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(1)(1) and § 706.02(1)(2). Johnson et al in Example 15 and Example 2 in the making of 2E make a printing plate that has all but the acrylate resins of claims 41-45. However, in the paragraph bridging col. 11-12, Johnson et al teach using a much broader group of materials for their printing plates. The references fully incorporated into Johnson et al includes WO98/31550 which is Grabley et al. Grabley et al in Example 6 teach using a pigment mixed with a polyacrylate resin in the radiation absorbing layer and on page 5 other acrylate ester resins as well as (meth)acrylic acid resin are listed as binders for the radiation absorbing pigment layers used in the printing plates set forth. Since Grabley et al is completely incorporated by Johnson et al then the plates of Grabley et al wherein the modified pigments of Johnson et al are used instead of those disclosed Grabley et al make prima facie obvious applicants' printing plates of claims 41-45 because Johnson et al teaches their use together. Wherein the pigments of Johnson et al from col. 4, line 66 to col. 6, line 4, and polymeric groups of polystyrene, styrene copolymers and acrylic polymers are used to modify the pigments, the printing plates of Johnson et al make prima facie obvious applicants' plates of claims 46-49 and 52-55.

21. Claims 23-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (WO 99/51690) as evidenced by Van Damme et al (EP 0 803 772 A2). Johnson et al disclose in SUMMARY OF THE INVENTION that they have provided modified pigment products which are capable of improving the dispersibility and dispersion stability of the pigment in compositions and formulations including those used to manufacture lithographic printing plates such as infrared or near-infrared laser imageable printing plates. The carbon blacks are among those adapted by Johnson et al. Van Damme et al which is cited by Johnson et al on pages 13-14 teach the formation of thermosensitive layers wherein phenolic resins are mixed with pigments like carbon black to form laser imageable layers that become soluble or swellable in

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aqueous medium. Such resins are inclusive of novolaks which are phenol-formaldehyde polymers, polyvinyl phenols which are polyvinyl hydroxystyrene and polyacrylic acids. With respect to instant claims 23- 55, the use of the modified carbon black pigments of Johnson et al in the plates of Van Damme et al would have been obvious to obtain a more stable dispersion of pigment. In Van Damme et al, see particularly Abstract, page 3, lines 35-page 4, lines 20, page 5, lines 10-22.

22. Claims 23 -55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (6,336,965 B1) as evidenced by Van Damme et al (EP 0 803 772 A2). The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(1)(1) and § 706.02(1)(2). ). Johnson et al disclose in SUMMARY OF THE INVENTION that they have provided modified pigment products which are capable of improving the dispersibility and dispersion stability of the pigment in compositions and formulations including those used to manufacture lithographic printing plates such as infrared or near-infrared laser imageable printing plates. The carbon blacks are among those adapted by Johnson et al. Van Damme et al which is cited by Johnson et al in the paragraph bridging col. 11-12 teach the formation of thermosensitive layers wherein phenolic resins are mixed with pigments like carbon black to form laser imageable layers that become soluble or swellable in aqueous medium. Such resins are inclusive of novolaks which are



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phenol-formaldehyde polymers, polyvinyl phenols which are polyvinyl hydroxystyrene and polyacrylic acids. With respect to instant claims 23 -55, the use of the modified carbon black pigments of Johnson et al in the plates of Van Damme et al would have been obvious to obtain a more stable dispersion of pigment. . In Van Damme et al, see particularly Abstract, page 3, lines 35-page 4, lines 20, page 5, lines 10-22.

23. Claims 23-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (5,885,335) in view of Van Damme et al (EP 0 803 772 A2). Adams et al teach modifying carbon materials such as carbon blacks with ionic groups or ionizable groups to modify their dispersibility in polymeric coatings as well as obtain carbon products of improved gloss and flow. Van Damme et al teach the formation of thermosensitive layers wherein phenolic resins are mixed with pigments like carbon black to form laser imageable layers that become soluble or swellable in aqueous medium. Such resins are inclusive of novolaks which are phenol-formaldehyde polymers, polyvinyl phenols which are polyvinyl hydroxystyrene and polyacrylic acids. With respect to instant claims 23-35, the use of the modified carbon black pigments of Adams et al in the plates of Van Damme et al would have been obvious to obtain a more stable dispersion of pigment.

24. Claims 1-23, 83-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Damme et al (EP 0 803 772 A2) or Grabley et al (WO 98/31550) in view of Adam et al (5,698,016). Van Damme et al and Grabley et al teach making the instant printing plates with the exception of using the modified pigment set forth. However, Adams et al teach using the pigment when carbon black in conventional compositions. In Adams et al see particularly col. 7, lines 55-61. With respect to instant claims 1-23 and 83-90, the use of the pigments of Adams et al as the carbon black of Van Damme et al or Grabley et al would have been prima facie obvious to enhance pigment dispersibility as set forth by Adams et al in col. 1. In Adams et al, also see col. 4, 6, and 8.

25. Claims 74, 76 and 79 and 81-82 are rejected under 35 U.S.C. 102(b) as being anticipated by Sypek et al (5,286,594). In Sypek et al, see particularly the Abstract, co. 1, lines 26-47, Summary of the Invention, col. 4, lines 40- end of col. 5, col. 6, lines 26-45, col. 7, lines 36-56 and Example 1 (57-760002 chip coated with an acrylamide substituted cellulose ester, and mixed

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in with an acrylamide substituted cellulose ester), Example 2 wherein 79R27C chip is the pigment coated with polyvinylbutyral polymer and is mixed with a cellulose polymer and Example 9 wherein chip 79R84C is used as encapsulated pigment coated with an acrylated polyurethane, i.e. an acrylic polymer, and polyvinylbutyral polymer encasing perylene maroon pigment, and claims. The pigment of Sypek et al is radiation absorptive inherently as evidenced by its being used to produce a color in the lithographic printing plates made. These example plates of Sypek et al anticipate the plates of instant claims 74, 76 and 79 and 81-82. The coated pigments of Sypek et al are held to be modified pigment products. Applicants have made no requirements other than modification for this embodiment in the specification. There is no limit on the modification other than polymer partially or fully coat a pigment.

26. Claims 65-66 and 72-73 are allowed.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.*

*Any inquiry of a general nature or relating to the status of this application should be directed to the 1700 receptionist whose telephone number is (703) 308-0661.*

Cynthia Hamilton  
April 21, 2003



**CYNTHIA HAMILTON  
PRIMARY EXAMINER**